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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,039	01/17/2002	Shishir Pardikar	13768.783.91	1257
47973 7590 . 04/16/2007 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER SERRAO, RANODHI N	
			ART UNIT 2141	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS		MAIL DATE 04/16/2007	DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/052,039	PARDIKAR ET AL.	
	Examiner	Art Unit	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,21-24 and 26-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18,21-24 and 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-18, 21-24, and 26-41 have been considered but are moot in view of the new ground(s) of rejection.
2. The applicant argued in substance the newly added limitations of independent claims 1, 16, and 33. However, the new grounds teach these and the added features. See rejections below.

Claim Objections

3. Claims 1 and 33 are objected to because of the following informalities: The word "priority" is misspelled in line 11 of claim 1 and in line 18 in claim 33. Appropriate correction is required.
4. Claim 26 is objected to because of the following informalities: Claim 26 depends on cancelled claim 25. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-11, 15-18, 23, 26-27, and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serlet et al. (6,842,770) and Doragh (5,341,499).

8. As per claim 1, Serlet et al. teaches in a computer network, a method of automatically and transparently handling WebDAV server and file access requests (see Serlet et al., col. 5, line 60-col. 6, line 14), the method comprising: receiving at an I/O manager an I/O request initiated from an application program, wherein the request indicates the filename of a file (see Serlet et al., col. 6, lines 25-64); to indicate whether the specified share and file is accessible on a WebDAV server (see Serlet et al., col. 8, lines 25-53); if the specified share and file are accessible, requesting a local file system to create the file (see Serlet et al., col. 7, lines 35-56), downloading the file to a local cache of the file system (see Serlet et al., col. 9, lines 54-63); returning a file handle corresponding to the file in the local cache to the application program (see Serlet et al., col. 11, lines 24-49); and providing access to the file in the local cache of the file system via the file handle (see Serlet et al., col. 9, line 64-col. 10, line 13); and receiving a request to close the file via the file handle, and when received, uploading the file from the local cache of the file system to the WebDAV server (see Serlet et al., col. 12, lines 45-54). But fails to teach polling available redirectors to determine which redirectors are configured to handle the application program's I/O request, each redirector

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corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the application program's I/O request, prioritizing the responses such that a redirector is given priority to handle the I/O request. However, Doragh teaches polling available redirectors to determine which redirectors are configured to handle the application program's I/O request, each redirector corresponding to one or more servers of a specified server type (see Doragh, col. 2, lines 15-37); for any redirectors that respond indicating an ability to handle the application program's I/O request (see Doragh, col. 5, lines 28-36), prioritizing the responses such that a redirector is given priority to handle the I/O request (see Doragh, col. 5, lines 37-68). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. to polling available redirectors to determine which redirectors are configured to handle the application program's I/O request, each redirector corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the application program's I/O request, prioritizing the responses such that a redirector is given priority to handle the I/O request in order to permit concurrent processing of multiple server requests utilizing diverse servers without requiring a user to terminate and load an alternate file system device (see Doragh, col. 2, lines 10-14).

9. As per claim 2, Serlet-Doragh teach receiving an I/O request initiated from an application program comprises, receiving a Universal Resource Identifier corresponding to a file on the WebDAV server (see Serlet et al., column 9, lines 38-53).

10. As per claim 3, Serlet-Doragh teach wherein receiving an I/O request initiated from an application program comprises, receiving a filename and an identifier previously mapped to a share on the WebDAV server (see Serlet et al., column 9, lines 54-63).

11. As per claims 4, 5, 7, 9, and 11, the above-mentioned motivation of claim 1 applies fully in order to combine Serlet et al. and Doragh.

12. As per claim 4, Doragh teaches a method wherein polling available redirectors to determine which redirectors are configured to handle the application program's I/O request (see Doragh, col. 2, lines 15-37) and Serlet et al. teaches, issuing an HTTP OPTIONS request, and evaluating a response therefrom (see Serlet et al., column 7, lines 35-56: wherein requests to create or delete a file or directory, etc. serve the function of HTTP OPTIONS request).

13. As per claim 5, Doragh teaches a method wherein polling available redirectors to determine which redirectors are configured to handle the application program's I/O request (see Doragh, col. 2, lines 15-37) and Serlet et al. teaches issuing a WebDAV PROPFIND request directed to share on the WebDAV server, and evaluating a response therefrom (see Serlet et al., column 11, lines 24-49).

14. As per claim 6, Serlet-Doragh teach a method wherein the WebDAV server returns property information in response to the WebDAV PROPFIND request directed to the share and further comprising, maintaining the property information in a local data structure (see Serlet et al., column 8, line 66-column 9, line 22; column 11, lines 50-65).

15. As per claim 7, Doragh teaches a method wherein polling available redirectors to determine which redirectors are configured to handle the application program's I/O

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request (see Doragh, col. 2, lines 15-37) and Serlet et al. teaches issuing a WebDAV PROPFIND request directed to on the WebDAV server, and evaluating a response therefrom (see Serlet et al., column 11, lines 24-49).

16. As per claim 8, Serlet-Doragh teach a method wherein the WebDAV server returns property information in response to the WebDAV PROPFIND request directed to the file, and further comprising, maintaining the property information in a local data structure (see Serlet et al., column 8, line 66-column 9, line 22; column 11, lines 50-65).

17. As per claim 9, Doragh teaches a method wherein polling available redirectors to determine which redirectors are configured to handle the application program's I/O request (see Doragh, col. 2, lines 15-37) and Serlet et al. teaches issuing an HTTP OPTIONS request, evaluating a corresponding response, and determining that the server a WebDAV server (see Serlet et al., column 6, line 25-64); issuing a WebDAV PROPFIND request directed to a share on the WebDAV server, evaluating a corresponding response, and determining that the share exists on the WebDAV server, the response including share property information; and issuing a WebDAV PROPFIND request directed to the file, evaluating a corresponding response, and determining that the file exists, the response including file property information (see Serlet et al., column 11, lines 24-49).

18. As per claim 10, Serlet-Doragh teach a method of maintaining the share property information and the file property information in at least one local data structure (see Serlet et al., column 8, line 66-column 9, line 22; column 11, lines 50-65).

19. As per claim 11, Doragh teaches a method wherein polling available redirectors to determine which redirectors are configured to handle the application program's I/O request (see Doragh, col. 2, lines 15-37) and Serlet et al. teaches communicating with at least one other local component to indicate that at least this request can be handled (see Serlet et al., column 5, lines 20-52).

20. As per claim 15, Serlet-Doragh teach a computer-readable storage medium having computer-executable instructions for performing the method claim 1 (see Serlet et al., column 2, line 51-column 3, line 19).

21. As per claim 16, Serlet et al. teaches a computer-implemented method of automatically and transparently handling WebDAV server and file access requests (see Serlet et al., col. 5, line 60-col. 6, line 14), the method comprising: receiving at a local programming interface layer an application I/O request comprising a WebDAV Uniform Resource Identifier (URI) (see Serlet et al., col. 5, lines 20-52 and col. 7, lines 35-56); and to indicate whether the file identified by the URI is accessible on the WebDAV server (see Serlet et al., col. 10, line 63-col. 11, line 17) and if the specified share and file are accessible, handling the request (see Serlet et al., col. 5, lines 20-52). But fails to teach polling available redirectors to determine which redirectors are configured to handle the request, each redirector corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the request, prioritizing the responses such that a redirector is given priority to handle the request. However, Doragh teaches polling available redirectors to determine which redirectors are configured to handle the request, each redirector corresponding to one or more

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servers of a specified server type (see Doragh, col. 2, lines 15-37); for any redirectors that respond indicating an ability to handle the request (see Doragh, col. 5, lines 28-36), prioritizing the responses such that a redirector is given priority to handle the request (see Doragh, col. 5, lines 37-68). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. to polling available redirectors to determine which redirectors are configured to handle the request, each redirector corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the request, prioritizing the responses such that a redirector is given priority to handle the request in order to permit concurrent processing of multiple server requests utilizing diverse servers without requiring a user to terminate and load an alternate file system device (see Doragh, col. 2, lines 10-14).

22. As per claim 17, Serlet-Doragh teach the application request includes the Universal Resource Identifier (see Serlet et al., column 5, lines 20-52).

23. As per claim 18, Serlet-Doragh teach a method wherein the application request includes an identifier that has been previously mapped to at least part of the Universal Resource Identifier (see Serlet et al., column 9, lines 54-63).

24. As per claim 21, Serlet-Doragh teach a method wherein the application request comprises an I/O request directed to a file, and wherein handling the request comprises creating a local file corresponding to the I/O request (see Serlet et al., column 7, lines 35-56).

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25. As per claim 22, Serlet-Doragh teach downloading at least some file data from the WebDAV server to the local file (see Serlet et al., column 4, lines 27-53: wherein accessing information serves as downloading file data).

26. As per claim 23, Serlet-Doragh teach returning a file handle corresponding to the local file to the application (see Serlet et al., column 11, lines 24-49).

27. As per claim 26, Serlet-Doragh teach the application program's request indicates a share on the WebDAV server and further comprising, issuing a WebDAV PROPFIND request directed to the share on the WebDAV server (see Serlet et al., column 11, lines 24-49).

28. As per claim 27, Serlet-Doragh teach a method wherein the application program's request further indicates a file on the share on the WebDAV server, and further comprising, issuing a WebDAV PROPFIND request directed to the file (see Serlet et al., column 11, lines 24-49).

29. As per claim 32, Serlet-Doragh teach a computer-readable storage medium having computer-executable instructions for performing the method claim 16 (see Serlet et al., column 2, line 51-column 3, line 19).

30. As per claim 33, Serlet et al. teaches in a computer network, a system for automatically and transparently handling WebDAV server and file access requests (see Serlet et al., col. 5, line 6-col. 7, line 14), the system comprising, an application program that issues WebDAV-related requests including at least one request having a WebDAV Uniform Resource Identifier corresponding to a WebDAV server (see Serlet et al., column 5, lines 20-52); an I/O manager for that manipulates the WebDAV-related

requests issued from the application program for providing to the WebDAV redirector (see Serlet et al., col. 6, lines 25-64); and to indicate that the WebDAV redirector locally handling each request corresponding to the WebDAV server can be handled locally, or communicating with the WebDAV server to handle requests that cannot be handled locally (see Serlet et al., col. 7, lines 35-56). But fails to teach a redirector, the redirector configured to respond to polls used to determine which redirectors are configured to handle the application's request, each redirector corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the application program's request, prioritizing the responses such that a redirector is given priority to handle the request. However, Doragh teaches a redirector, the redirector configured to respond to polls used to determine which redirectors are configured to handle the application's request, each redirector corresponding to one or more servers of a specified server type (see Doragh, col. 2, lines 15-37); for any redirectors that respond indicating an ability to handle the application program's request (see Doragh, col. 5, lines 28-36), prioritizing the responses such that a redirector is given priority to handle the request (see Doragh, col. 5, lines 37-68). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. to a redirector, the redirector configured to respond to polls used to determine which redirectors are configured to handle the application's request, each redirector corresponding to one or more servers of a specified server type; for any redirectors that respond indicating an ability to handle the application program's request, prioritizing the responses such that a redirector is given priority to handle the request in order to permit

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concurrent processing of multiple server requests utilizing diverse servers without requiring a user to terminate and load an alternate file system device (see Doragh, col. 2, lines 10-14).

31. As per claim 34, Serlet-Doragh teach a system wherein the identifier corresponding to a WebDAV server issued by the application comprises a Universal Resource Identifier (see Serlet et al., column 5, lines 20-52).

32. As per claim 35, Serlet-Doragh teach a system wherein the identifier corresponding to a WebDAV server issued by the application comprises an identifier previously mapped to a share on the WebDAV server (see Serlet et al., column 9, lines 54-63).

33. As per claim 38, Serlet-Doragh teach a system that: creates a local representation of the file (see Serlet et al., column 6, line 65-column 7, line 34); determines whether the file exists on the WebDAV server, and if so, downloads at least some of the data from the WebDAV server file to the local representation of the file (see Serlet et al., column 4, lines 27-53: wherein accessing information serves as downloading file data); returns a file handle corresponding to the local representation of the file to the application program (see Serlet et al., column 11, lines 24-49); receives I/O read and write requests associated with the file handle and handles the I/O read and write requests via the local representation of the file (see Serlet et al., column 11, lines 24-49; column 12, lines 35-44); and receives an I/O close request associated with the file handle, and handles the I/O close request by closing the local representation of the

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file and uploading at least part of the local representation of the file to the WebDAV server (see Serlet et al., column 11, lines 24-49).

34. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Serlet et al. and Doragh as applied to claim 16 above, and further in view of Charisius et al. (2002/0078432). Serlet et al. and Doragh teach the mentioned limitations of claim 16 above, but fail to teach a networking request to browse a network share on the WebDAV server, and wherein handling the request includes enumerating information of the network share. However, Charisius et al. teaches a networking request to browse a network share on the WebDAV server, and wherein handling the request includes enumerating information of the network share (see Charisius et al., ¶132). It would have been obvious to one having ordinary skill in the art at the time of the invention to add a networking request to browse a network share on the WebDAV server, and wherein handling the request includes enumerating information of the network share in order to allow more than one user to view the same workflow or project plan, to provide persistent storage, to monitor the progress of an activated project plan, to simultaneously create plans from the same workflow, and to have essentially unlimited access to the power of the tool through the ubiquity of the Internet (see Charisius et al., ¶ 10).

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35. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serlet et al. and Doragh as applied to claim 33 above, and further in view of French (6,654,794).

36. As per claim 36, Serlet et al. and Doragh teach the above-mentioned limitations of claim 33, but fail to teach a system wherein the WebDAV redirector receives requests from the application via an application programming interface. However, French teaches a system wherein the WebDAV redirector receives requests from the application via an application programming interface (see French, col. 4, line 66-col. 5, line 19). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. and Doragh to a system wherein the WebDAV redirector receives requests from the application via an application programming interface in order to perform its various operations and to provide the requisite functionality of its features (see French, col. 4, line 66-col. 5, line 19).

37. As per claim 37, Serlet et al. and Doragh teach the above-mentioned limitations of claim 33, but fail to teach a system wherein the WebDAV redirector receives the I/O request from a manager component. However, French teaches a system wherein the WebDAV redirector receives the I/O request from a manager component (see French, col. 4, lines 58-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. and Doragh to a system wherein the WebDAV redirector receives the I/O request from a manager component in order to order to perform its various operations and to provide the requisite functionality of its features (see French, col. 4, line 66-col. 5, line 19).

38. Claims 12-14, 28-30, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serlet et al. and Doragh as applied to claims 1 and 16 above, and further in view of Prust (6,714,968).

39. As per claim 12, Serlet et al. and Doragh teach the mentioned limitations of claim 1 above, but fail to teach determining that the file is encrypted on the WebDAV server, and wherein downloading the file to a local cache comprises, communicating with the file system to create an image of the file in the local cache that is also encrypted. Prust teaches determining that the file is encrypted on the WebDAV server, and wherein downloading the file to a local cache comprises, communicating with the file system to create an image of the file in the local cache that is also encrypted (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add determining that the file is encrypted on the WebDAV server, and wherein downloading the file to a local cache comprises, communicating with the file system to create an image of the file in the local cache that is also encrypted in order to allocate a corresponding storage area for each user and store the respective user information in metadata database (see Prust, col. 7, line 59-col. 8, line 7).

40. As per claim 13, Serlet et al., Prust, and Doragh teach the mentioned limitations of claims 1 and 12 above, but Serlet et al. and Doragh fail to teach communicating with the file system to open the image of the file such that the file system will transparently decrypt file data on read requests and will transparently encrypt file data on write

requests to the file. Prust teaches communicating with the file system to open the image of the file such that the file system will transparently decrypt file data on read requests and will transparently encrypt file data on write requests to the file (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add communicating with the file system to open the image of the file such that the file system will transparently decrypt file data on read requests and will transparently encrypt file data on write requests to the file in order to allow the user to access the respective storage area via the many access interfaces (see Prust, col. 7, line 59-col. 8, line 7).

41. As per claim 14, Serlet et al., Prust, and Doragh teach the mentioned limitations of claims 1 and 12 above, but Serlet et al. and Doragh fail to teach uploading the file from the local cache to the WebDAV server comprises, communicating with the file system to read data from the local image of the file such that the file will be uploaded as the encrypted image thereof. Prust teaches uploading the file from the local cache to the WebDAV server comprises, communicating with the file system to read data from the local image of the file such that the file will be uploaded as the encrypted image thereof (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add uploading the file from the local cache to the WebDAV server comprises, communicating with the file system to read data from the local image of the file such that the file will be uploaded as the encrypted

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image thereof in order to prevent unauthorized users from accessing information about other users (see Prust, column 7, lines 39-55).

42. As per claim 28, Serlet et al. and Doragh teach the mentioned limitations of claim 16 above but fail to teach the application request comprises an I/O request directed to an encrypted file, and further comprising, automatically decrypting the data locally when downloading the encrypted file from the WebDAV server and automatically encrypting the data locally when uploading the encrypted file to the WebDAV server. However, Prust teaches the application request comprises an I/O request directed to an encrypted file, and further comprising, automatically decrypting the data locally when downloading the encrypted file from the WebDAV server and automatically encrypting the data locally when uploading the encrypted file to the WebDAV server (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add the application request comprises an I/O request directed to an encrypted file, and further comprising, automatically decrypting the data locally when downloading the encrypted file from the WebDAV server and automatically encrypting the data locally when uploading the encrypted file to the WebDAV server in order to allocate a corresponding storage area for each user and store the respective user information in metadata database (see Prust, col. 7, line 59-col. 8, line 7).

43. As per claim 29, Serlet et al. and Doragh teach the mentioned limitations of claim 16 above, but fail to teach the application request comprises an I/O request directed to a file that is encrypted on the WebDAV server, and wherein handling the request

comprises, creating a local file corresponding to the I/O request and downloading an image of the file on the WebDAV server to the local file, wherein the local file is written by a local system such that the image corresponds to the encrypted image on the WebDAV server. However, Prust teaches the application request comprises an I/O request directed to a file that is encrypted on the WebDAV server, and wherein handling the request comprises, creating a local file corresponding to the I/O request and downloading an image of the file on the WebDAV server to the local file, wherein the local file is written by a local system such that the image corresponds to the encrypted image on the WebDAV server (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add the application request comprises an I/O request directed to a file that is encrypted on the WebDAV server, and wherein handling the request comprises, creating a local file corresponding to the I/O request and downloading an image of the file on the WebDAV server to the local file, wherein the local file is written by a local system such that the image corresponds to the encrypted image on the WebDAV server in order to allow the user to access the respective storage area via the many access interfaces (see Prust, col. 7, line 59-col. 8, line 7).

44. As per claim 30, Serlet et al., Prust, and Doragh teach the mentioned limitations of claims 16 and 29 above, but Serlet et al. and Doragh fail to teach communicating with the file system to open the local file such that the file system will transparently decrypt file data read on read requests and will transparently encrypt file data written on write

requests. Prust teaches communicating with the file system to open the local file such that the file system will transparently decrypt file data read on read requests and will transparently encrypt file data written on write requests (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written). It would have been obvious to one having ordinary skill in the art at the time of the invention to add communicating with the file system to open the local file such that the file system will transparently decrypt file data read on read requests and will transparently encrypt file data written on write requests in order to store data files and communicate the data files to the storage server for storage within the storage area (see Prust, col.1, lines 49-67).

45. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Serlet et al., Doragh, and Prust (6,714,968). Serlet et al., Doragh, and Prust teach the limitations mentioned above in claims 16, 29, and 30 but Prust and Doragh fail to teach detecting a request to close the local file, closing the local file, communicating with the file system to open the local file such that the file will not be decrypted when read and uploading the file to the WebDAV server as an encrypted file. However, Serlet et al. teaches detecting a request to close the local file, closing the local file, communicating with the file system to open the local file (see Serlet et al., column 11, lines 24-49); such that the file will not be decrypted when read (see Serlet et al., column 12, lines 35-44); and uploading the file to the WebDAV server as an encrypted file (see Serlet et al., column 5, line 60-column 6, line 14: wherein authenticated access functions as being encrypted). It would have been obvious to one having ordinary skill in the art at the time of the invention to

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add detecting a request to close the local file, closing the local file, communicating with the file system to open the local file such that the file will not be decrypted when read and uploading the file to the WebDAV server as an encrypted file in order to allow only the authorized user to have access to his/her data on the WebDAV server (see Serlet et al., col. 6, lines 15-23).

46. As per claim 39, Serlet et al. and Doragh teach the limitations mentioned above in claims 33 and 38 and furthermore teaches a system wherein requesting the file system to create a local file that is opened such that transparent encryption and decryption are not enabled therefor (see Serlet et al., column 5, line 60-column 6, line 14: wherein authenticated access may not be enabled by the user); requesting the file system to close the local file (see Serlet et al., column 11, lines 24-49). But fails to teach the WebDAV file is encrypted, and wherein downloading at least some of the encrypted file data by requesting the file system to write to the local file without translation thereof. Prust however teaches the WebDAV file is encrypted (see Prust, column 7, lines 39-55: wherein encryption and decryption may be done either when the file is read or written); downloading at least some of the encrypted file data by requesting the file system to write to the local file without translation thereof (see Prust, column 7, lines 7-34). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Serlet et al. to a system wherein the WebDAV file is encrypted, and that creates the local representation of the file by downloading at least some of the encrypted file data by requesting the file system to write to the local file without

translation thereof in order to allow an user to access virtual storage area using a conventional electronic mail software application (see Prust, column 7, lines 7-34).

47. As per claim 40, Serlet et al., Doragh, and Prust teach the limitations mentioned above in claims 33, 38, and 39. Serlet et al. also teaches a system requesting the file system to reopen the local file (column 11, lines 24-49). But fails to teach reads therefrom are decrypted and writes thereto are encrypted. Prust however teaches reads therefrom are decrypted and writes thereto are encrypted (column 7, lines 39-55). It would have been obvious to one having ordinary skill in the art at the time of the invention to add reads therefrom are decrypted and writes thereto are encrypted in order to allocate a corresponding storage area for each user and store the respective user information in metadata database (see Prust, col. 7, line 59-col.8, line 7).

48. As per claim 41, Serlet et al., Doragh, and Prust teach the limitations mentioned above in claims 33, 38, 39, and 40. But Doragh and Prust fail to teach when the WebDAV redirector handles the I/O close request, and before uploading the file, the WebDAV redirector closes the local representation of the file, and reopens the local file by requesting the file system to open the file such that reads therefrom are not decrypted. Serlet et al. however teaches a method of handling the I/O close request, and before uploading the file, closing the local representation of the file (see Serlet et al., column 11, lines 24-49), and reopening the local file by requesting the file system to open the file such that reads therefrom are not decrypted (see Serlet et al., column 5, line 60-column 6, line 14: wherein authenticated access function as being encrypted). It would have been obvious to one having ordinary skill in the art at the time of the

invention to add a method of handling the I/O close request, and before uploading the file, closing the local representation of the file, and reopening the local file by requesting the file system to open the file such that reads therefrom are not decrypted in order for authorized users to access their data on the WebDAV server without needing to input authentication information for every transmission (see Serlet et al., col. 6, lines 15-23).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER